

REMARKS

Claims 16-29 and 49-74 are pending, with claims 16 and 55 being independent. Claims 16 and 53 have been amended and claim 19 has been cancelled.

Statement of the Substance of the Interview

Applicants appreciate the courtesies extended to Applicant's representative and Mr. Stephen Olson during the interview of October 10, 2006. During the interview, Applicant's representative discussed the distinctions between Trost (U.S. Patent No. 3,229,918) and independent claim 16. The details of Applicant's position expressed during the interview are provided in greater detail hereinafter under the appropriate headings.

Claim Rejections Under 35 U.S.C. § 102

Claims 16, 19-21, 25-27, and 29 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Trost (U.S. Patent No. 3,229,918). This rejection is respectfully traversed.

Trost does not describe or suggest at least the claimed monolithic manifold including a cycloid-shaped grinding chamber formed in a front face of the manifold and operable to impart particle-on-particle size reduction of material within the grinding chamber.

The Examiner has equated the body member 11 of Trost to the claimed monolithic manifold and the classification chamber 44 to the claimed grinding chamber. However, the classification chamber 44 of Trost is not part of the body member 11 but rather is defined by separate and replaceable components (see, e.g., col. 3, lines 39-75 through col. 4, lines 1-23).

Even if classification chamber 44 were considered a grinding chamber, which applicant does not concede, the classification chamber 44 is not included as part of a monolithic manifold and is not operable to impart particle-on-particle size reduction of a material therein. As discussed during the interview, and specifically recited by Trost, grinding takes place within the impact chamber 56, which is not cycloid-shaped. The alleged cycloid-shaped classification chamber 44 of Trost is not a grinding chamber, but instead is a low velocity chamber permitting smaller particles to be separated (classified) and to exit through the outlet and larger particles to

return to the grinding chamber (21 in Trost, Fig. 4). Trost does not describe or suggest that the flow of pressurized fluid through nozzles 78 and 79, which provides the necessary action to erode particles within the impact chamber 56, also provides the necessary action within chamber 44 to impart particle-on-particle size reduction of material within chamber 44. There is simply no basis to conclude that the fluid flow that enters chamber 44 is at such a velocity to cause particle-on-particle size reduction. Further, unlike particle-on-particle reduction that may occur in a high velocity setting, e.g., Fay (U.S. Patent No. 3,559,918, see Examiner's Interview Summary dated October 16, 2006), the Examiner has not demonstrated how the classification chamber 44 of Trost is capable of particle-on-particle size reduction of material within the grinding chamber. Further, Fay does not describe or suggest particle-on-particle size reduction of material within the vortex chamber (see, e.g., Fig. 11, and col. 10, lines 1-55 of Fay). Similarly, if one were to equate the classification recess 13 of Fig. 4 to the claimed grinding chamber, the same analysis follows, i.e., even if a pressurized fluid were injected into groove 21, it would not result in particle-on-particle size reduction of material within the recess 13.

Accordingly, claim 16, and its dependent claims, are patentable over Trost for at least the reasons discussed above.

Claim Rejections Under 35 U.S.C. § 103

Claims 17 and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Trost in view of Coombe et al. (U.S. Patent No. 3,840,188). Claims 23 and 24 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Trost in view of Fay (U.S. Patent No. 3,559,895). Claim 28 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Trost in view of Andrews (U.S. Patent No. 2,032,827). These rejections are respectfully traversed.

Coombe, Fay, and Andrews do not overcome the deficiencies in Trost discussed above. In particular, none of the references describe a monolithic manifold as claimed. Therefore, claims 17, 18, 23, 24 and 28 are patentable over Trost, Coombe, Fay and Andrews.

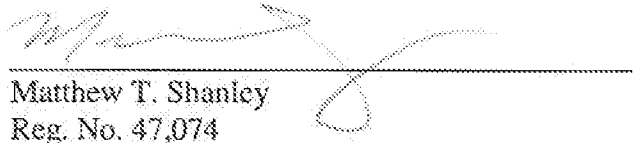
Applicant does not acquiesce in the Examiner's characterizations of the art. For brevity and to advance prosecution, however, Applicant may have not addressed all characterizations of the art and reserves the right to do so in further prosecution of this or a subsequent application. The absence of an explicit response by Applicant to any of the Examiner's positions does not constitute a concession of the Examiner's positions. The fact that Applicant's comments have focused on particular arguments does not constitute a concession that there are not other arguments for patentability of the claims. All of the dependent claims are patentable for at least the reasons given with respect to the claims on which they depend.

Applicant submits that all of the claims of the present application should be allowed.

Applicant respectfully petitions for a three month extension of time. Please apply \$510.00 for the Petition for Extension of Time fee to deposit account 06-1050. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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